

CLAIMS

1. A transmission data structure of static media transmission data, said static media transmission data being for transporting and playing static media playback data in order, said static media playback data being for use for a playback of static media data,

wherein the static media playback data includes a plurality of divided static media data where the static media data is divided; and static media header data containing information for playing the divided static media data; and

wherein the static media transmission data includes a divided media data identifier added to the divided static media data, a static media header data identifier added to the static media header data, and static media information relating to divided static media data contained in next static media transmission data.

2. A transmission data structure of program transmission data, said program transmission data being for transporting and playing program playback data in order, said program playback data being for use for a playback of program data,

wherein the program playback data includes a plurality of divided program data where the program data is divided, and program header data containing information

for playing the divided program data; and

wherein the program transmission data includes a divided program data identifier added to the divided program data, a program header data identifier added to the program header data, and program information relating to divided program data contained in next program transmission data.

3. A transmission data structure of text transmission data, said text transmission data being for transporting and playing text playback data in order, said text playback data being for use for a playback of text data,

wherein the text playback data includes a plurality of divided text data where the text data is divided, and text header data containing information for playing the divided text data; and

wherein the text transmission data includes a divided text data identifier added to the divided text data, a text header data identifier added to the text header data, and text information relating to divided text data contained in next text transmission data.

4. The transmission data structure of text transmission data according to claim 3, wherein the text information relating to the divided text data contained in the next text transmission data includes the number of

said divided text data contained in the next text transmission data.

5. The transmission data structure of text transmission data according to claim 3, wherein the text information relating to the divided text data contained in the next text transmission data includes text playback time information of the divided text data contained in the next text transmission data.

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6. The transmission data structure of text transmission data according to claim 3, wherein the text information relating to the divided text data contained in the next text transmission data includes text data length information of the divided text data contained in the next text transmission data.

7. A transmission method for text transmission data, said text transmission data being for transporting and playing text playback data in order, said text playback data being for use for a playback of text data, said transmission method comprising:

generating a payload section of the text transmission data based on the text playback data, said text playback data including a plurality of divided text data where the text data is divided and playback start

information for starting a playback of the divided text data;

generating a header section of the text transmission data to which text information contained in
5 a next packet is added; and

adding the header section to each generated payload section and making a packet,

wherein each payload section includes the playback start information of the text header data.

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8. A transmission method for text transmission data, said text transmission data being for transporting and playing text playback data in order, said text playback data being for use for a playback of text data, said
15 transmission method comprising:

generating a payload section of the text transmission data based on said text playback data including a plurality of divided text data where the text data is divided and playback start information for starting
20 a playback of the divided text data;

generating a header section of the text transmission data to which the number of divided text data contained in a next packet is added; and

adding the header section to each generated payload
25 section and making a packet,

wherein each payload section includes playback

start information of the text header data.

9. A transmission method for text transmission data, said text transmission data being for transporting and
5 playing text playback data in order, said text playback data being for use for a playback of text data, said transmission method comprising:

generating a payload section of the text transmission data based on said text playback data
10 including a plurality of divided text data where the text data is divided and playback start information for starting a playback of the divided text data;

generating a header section of the text transmission data to which playback time information of
15 the divided text data contained in a next packet is added;
and

adding the header section to each generated payload section and making a packet,

wherein each payload section includes the playback
20 start information of the text header data.

10. A transmission method for text transmission data, said text transmission data being for transporting and
playing text playback data in order, said text playback
25 data being for use for a playback of text data, said transmission method comprising:

generating a payload section of the text transmission data based on the text playback data, said text playback data including a plurality of divided text data where the text data is divided and playback start
5 information for starting a playback of the divided text data;

generating a header section of the text transmission data to which a text data length of the divided text data contained in a next packet is added; and

10 adding the header section to each generated payload section and making a packet,

wherein each payload section includes the playback start information of the text header data.

15 11. A receiving method for text transmission data, said text transmission data being for transporting and playing text playback data in order, said text playback data being for use for a playback of text data, said receiving method comprising:

20 receiving first text transmission data and determining that there is a data loss when no second transmission data is received after a playback time of the first text data passes; and

replacing text information relating to divided
25 text data contained in next text transmission data contained in the first text transmission data with the

second text transmission data, when it is determined that there is a data loss.

12. A reception and display method for text
5 transmission data, said text transmission data being for transporting and playing text playback data in order, said text playback data being for use for a playback of text data, said method comprising:

receiving first text transmission data and
10 determining that there is a data loss when no second transmission data is received after a playback time of the first text data passes;

replacing text information relating to divided
text data contained in next text transmission data
15 contained in the first text transmission data with the second text transmission data when it is determined that there is a data loss; and

displaying an alternate text by a text data length
when the text data length is 1 or more and executing no
20 display of text data when the text data length is 0.

13. A data receiving apparatus comprising:

a data receiving section that receives text data
from a server or a counterpart station;

25 a text display time extracting section that
extracts a text display time for displaying text data from

the received data;

an extension header storing section that extracts
and stores information of an extension header where text
data information of next text data is stored from the
5 received data;

a data loss determining section that determines
whether there is a loss of text data;

a text extracting and storing section that extracts
and stores text data from the received data;

10 an alternate text storing section that stores an
alternate text to be displayed when no text data to be
displayed is received;

a text display time deciding section that decides
a text display time input from the extension header storing
15 section as a time for displaying a text when the data loss
determining section determines that there is a data loss,
and decides a text display time input from the text display
time extracting section as the time for displaying the text
when it is determined that there is no data loss;

20 a display text deciding section that decides to
display the text stored in the text extracting and storing
section when the data loss determining section determines
that there is no data loss, and decides to display the
alternate text stored in the alternate text storing section
25 when the data loss determining section determines that
there is a data loss; and

a text displaying section that displays the time decided by the text display time deciding section and the text decided by the display text deciding section.

- 5 14. A data transmitting apparatus that transmits text data to a counterpart station, comprising:

a text information storing section that stores text information to be transmitted to the counterpart station;

- a next text data information generating section
10 that generates information including a text length and/or a playback time contained in a text to be transmitted as next transmission data after transmission data currently being generated;

- a header generating section that generates a header
15 from control information for text data transmission and the next text data information generating information;

a payload generating section that generates a payload of transmission data from text data to be transmitted and its modification information;

- 20 a transmission data combining section that combines transmission data from the header and the payload; and

a data transmitting section that transmits the transmission data to the counterpart station.

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15. A transmission data structure of static image

transmission data, said static image transmission data being for transporting and playing static image playback data in order, said static image playback data being for use for a playback of static image data,

5 wherein the static image playback data includes a plurality of divided static image data where the static image data is divided, and static image header data containing information for playing the divided static image data; and

10 wherein the static image transmission data includes a divided static image data identifier added to the divided static image data, a static image header data identifier added to the static image header data, and static image information relating to divided static image data
15 contained in next static image transmission data.

16. The transmission data structure of static image transmission data according to claim 15, wherein the static image information relating to the divided static image data
20 contained in the next static image transmission data includes a same number of the static image information as the divided static image data contained in the next static image transmission data.

25 17. The transmission data structure of static image transmission data according to claim 15, wherein the static

image information relating to the divided static image data contained in the next static image transmission data includes static image playback time information of divided static image data contained in the next static image transmission data.

18. The transmission data structure of static image transmission data according to claim 15, wherein the static image information relating to the divided static image data contained in the next static image transmission data includes static image size information of divided static image data contained in the next static image transmission data.

15 19. A transmission method for static image transmission data, said static image transmission data being for transporting and playing static image playback data in order, said static image playback data being for use for a playback of static image data, said transmission method comprising:

generating a payload section of the static image transmission data based on the static image playback data, said static image playback data including a plurality of divided static image data where the static image data is divided and playback start information for starting a playback of the divided static image data;

generating a header section of the static image transmission data to which static image information contained in a next packet is added; and

adding the header section to each generated payload
5 section and making a packet,

wherein each payload section includes the playback start information of the static image header data.

20. A transmission method for static image
10 transmission data, said static image transmission data being for transporting and playing static image playback data in order, said static image playback data being for use for a playback of static image data, said transmission method comprising:

15 generating a payload section of the static image transmission data based on the static image playback data, said static image playback data including a plurality of divided static image data where the static image data is divided and playback start information for starting a
20 playback of the divided static image data;

generating a header section of the static image transmission data to which the number of divided static image data contained in a next packet is added; and

adding the header section to each generated payload
25 section and making a packet,

wherein each payload section includes the playback

start information of the static image header data.

21. . A transmission method for static image transmission data, said static image transmission data
5 being for transporting and playing static image playback data in order, said static image playback data being for use for a playback of static image data, said transmission method comprising:

generating a payload section of the static image
10 transmission data based on the static image playback data, said static image playback data including a plurality of divided static image data where the static image data is divided and playback start information for starting a playback of the divided static image data;

15 generating a header section of the static image transmission data to which a playback time information of divided static image data contained in a next packet is added; and

adding the header section to each generated payload
20 section and making a packet,

wherein each payload section includes the playback start information of the static image header data.

22. A transmission method for static image
25 transmission data, said static image transmission data being for transporting and playing static image playback

data in order, said static image playback data being for use for a playback of static image data, said transmission method comprising:

generating a payload section of the static image transmission data based on the static image playback data, said static image playback data including a plurality of divided static image data where the static image data is divided and playback start information for starting a playback of the divided static image data;

generating a header section of the static image transmission data to which a static image size of divided static image data contained in a next packet is added; and

adding the header section to each generated payload section and making a packet,

wherein each payload section includes the playback start information of the static image header data.

23. A receiving method for static image transmission data, said static image transmission data being for transporting and playing static image playback data in order, said static image playback data being for use for a playback of static image data, said receiving method comprising:

receiving first static image transmission data and determining that there is a data loss when no static image transmission data of a second static image is received after

a playback time of the first static image data passes; and
replacing static image information relating to
divided static image data contained in next static image
transmission data contained in the first static image
5 transmission data with the second static image transmission
data when it is determined that there is a data loss.

24. A reception and display method for static image
transmission data, said static image transmission data
10 being for transporting and playing static image playback
data in order, said static image playback data being for
use for a playback of static image data, said method
comprising:

receiving first static image transmission data and
15 determining that there is a data loss when no static image
transmission data of a second static image is received after
a playback time of the first static image data passes;
replacing static image information relating to
divided static image data contained in next static image
20 transmission data contained in the first static image
transmission data with the second static image transmission
data when it is determined that there is a data loss; and
displaying an alternate static image according to
a size of the static image.

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25. A data receiving apparatus comprising:

a data receiving section that receives static image data from a server or a counterpart station;

a static image display time extracting section that extracts a static image display time for displaying static
5 image data from the received data;

an extension header storing section that stores information of an extension header where static image data information of next static image data is stored;

a data loss determining section that determines
10 whether there is a loss of static image data;

a static image extracting and storing section that extracts and stores static image data from the received data;

an alternate static image storing section that
15 stores a static image to be displayed when no static image data to be displayed is received;

a static image display time deciding section that decides a static image display time input from the extension header storing section as a time for displaying a static
20 image when the data loss determining section determines that there is a data loss, and decides a static image display time input from the static image display time extracting section as the time for displaying a static image when it is determined that there is no data loss;

25 a display static image deciding section that decides to display the static image stored in the static

image extracting and storing section when the data loss determining section determines that there is no data loss, and decides to display the alternate static image stored in the alternate static image storing section when the data
 5 loss determining section determines that there is a data loss; and

a static image displaying section that displays the time decided by the static image display time deciding section and the static image decided by the display static
 10 image deciding section.

26. A data transmitting apparatus that transmits static image data to a counterpart station, comprising:

a static image information storing section that
 15 stores static image information to be transmitted to the counterpart station;

a next static image data information generating section that generates information including a static image size and a playback time contained in a static image to
 20 be transmitted as next transmission data after transmission data currently being generated;

a header generating section that generates a header from control information for static image data transmission and the next static image data information generating
 25 information;

a payload generating section that generates a

payload of transmission data from static image data to be transmitted and its modification information;

a transmission data combining section that combines transmission data from the header and the payload;

5 and

a data transmitting section that transmits the transmission data to the counterpart station.

27. A data transmission method that transmits
10 information indicating static media data and a playback time of the static media data to play the static media data and that transmits data indicating a playback time of next static media data to be played after the static media data together with the static media data.

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28. A data receiving method that receives static media transmission data indicating a playback time of static media data sent to play a plurality of static media data in order, comprising:

20 receiving first static media transmission data and making a determination as to whether second static media transmission data is received after a playback time of the first static media data to be played based on the first static media transmission data passes,;

25 determining that there is a data loss when no second static media transmission data is received based on a

determination result; and

starting transmission of a retransmission request of the first static media transmission data when it is determined that there is a data loss.

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29. A data receiving method that receives static media transmission data indicating a playback time of static media data sent to play a plurality of static media data in order and a playback time of next static media data to be played after the static media data, comprising:

receiving first static media transmission data and making a determination as to whether second static media transmission data for playing the next static media data subsequent to the first static media data is received after a playback time of the first static media data to be played passes, based on the first static media transmission data;

determining that there is a data loss when no second static media transmission data is received based on a determination result;

20 starting transmission of a retransmission request of the first static media transmission data when it is determined that there is a data loss; and

ending the transmission of the retransmission request of the second static media transmission data according to the passage of a playback time of the next static media data based on a playback time of the next static

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media data included in the first static media transmission data.

30. The data receiving method according to claim 29,
5 wherein a time that back by a round trip time that is required
 for a transmission of data between a transmitting side and
 a receiving side of the static media transmission data from
 a time at which a playback time of the next static media
 data ends, is set as a timing at which the transmission
10 of the retransmission request of the second static media
 transmission data is ended.

31. A data transmission method that transmits
 information indicating static media data and a playback
15 time of the static media data to play the static media data
 and that transmits data indicating a playback time of next
 static media data to be played after the static media data
 and information indicating the number of characters
 included in the next static media data together with the
20 static media data.

32. A data receiving method that receives static media
 transmission data indicating a playback time of static
 media data sent to play a plurality of static media data
25 in order, a playback time of next static media data to be
 played after the static media data and the number of

characters included in the next static media data,
comprising:

receiving static media transmission data and
making a determination as to whether next static media
5 transmission data for playing the next static media data
subsequent to the static media data is received after a
playback time of the static media data to be played passes,
based on the static media transmission data;

determining that there is a data loss when no next
10 static media transmission data is received based on a
determination result; and

starting transmission of a retransmission request
of the static media transmission data based on a condition,
which is shown by the static media transmission data, that
15 the number of characters of the next static data is greater
than 0 when it is determined that there is a data loss.

33. A data receiving apparatus that receives static
media transmission data indicating a playback time of
20 static media data sent to play a plurality of static media
data in order, comprising:

a reception result determining section that
receives first static media transmission data and makes
a determination as to whether second static media
25 transmission data is received after a playback time of the
first static media data to be played passes, based on the

first static media transmission data;

a data loss determining section that determines
that there is a data loss when no second static media
transmission data is received based on a determination
5 result of the reception result determining section; and

a retransmission request transmission starting
section that starts transmission of a retransmission
request of the first static media transmission data when
the data loss determining section determines that there
10 is a data loss.